

**Engineering Statement**  
**In Support of a**  
**Petition for Rule Making**  
**Capstar TX Limited Partnership**  
**CCB Texas Licenses, L.P.**  
**Rawhide Radio, L.L.C.**  
**Clear Channel Broadcasting Licenses, Inc.**

**General**

The instant Petition for Rule Making was prepared for Capstar TX Limited Partnership ("Capstar"), licensee of Station KWTX, Waco, Texas; CCB Texas Licenses, L.P. ("CCB Texas"), licensee of Stations KAJA, San Antonio, Texas and KHFI-FM, Georgetown, Texas; Rawhide Radio, L.L.C. ("Rawhide"), licensee of Station KNGT, McQueeney, Texas; and Clear Channel Broadcasting Licenses, Inc. ("Clear Channel"), licensee of KLFX, Nolanville, Texas. The above named petitioners are referred herein as The Joint Parties. It is prepared and submitted as a Petition for Rule Making. The Joint Parties propose to delete channel 248C at Waco, Texas (KWTX) and allot channel 247C1 at Lakeway, Texas as that community's first local service; substitute channel 245C1 for channel 247C (KAJA) at San Antonio; delete channel 244C1, Georgetown, Texas (KHFI) and allot channel 243C2 at Lago Vista, Texas; substitute channel 297A for channel 242A at Llano, Texas (KBAE); and substitute channel 249A for channel 297A at Nolanville, Texas (KLFX). All of the above realotments and channel substitutions will allow the deletion of channel 249C1 at McQueeney, Texas (KNGT) and its subsequent allotment to Converse, Texas on channel 249C1 as that community's first local service.

## **Methods**

The Joint Parties' Petition for Rule Making is presented in sections, in which each channel or licensed facility where a change is proposed, is discussed individually. All sections begin with an allocation or channel spacing study. Additional exhibits then support the proposed modification's technical compliance.

All searches were performed on a V-Soft SearchFM program. The studies were based on the latest technical data from the Commission's databases. Mapping, population counts, and gain/loss areas were conducted using a professional mapping program from MapInfo Corporation, Version 5.5. The program contains the exact community boundaries of the relevant cities. In pertinent cases where community boundaries were critical, the boundaries were cross-checked with the U.S. Census Bureau's TIGER maps.

All modifications that require a class change or antenna site modification have a gain/loss study for population and square kilometers.

## **Nature of The Joint Parties Petition for Rule Making**

A summary of all communities and their related channels (present and proposed) is included in Table 1 for reference. The Petition for Rule Making provides for first local services at Converse, Lakeway, and Lago Vista, all Texas. In order to accomplish this, various channels and licensed facilities need to be modified in order to create compliance with §73.207. It creates a large increase in square kilometers covered. This is demonstrated by the large increase in the number of persons served within the new 60-dBu contour.

- I). KWTX – channel 248C, Waco, Texas. As discussed previously, the use of channel 249C1 at Converse, Texas requires modification of other facilities. KWTX must be

deleted at Waco on channel 248C and allotted to Lakeway on channel 247C1 in order to eliminate short spacing to the proposed use of channel 249A at Nolanville, Texas (KLFX). The allotment of channel 247C1 at Lakeway is short spaced to KWTX by 83.70 kilometers. This demonstrates that channel 247C1 at Lakeway is mutually exclusive with channel 248C at Waco. However, in order to allocate channel 247C1 to Lakeway for use by KWTX, additional changes must be made in the spectrum as follows:

A). KAJA – channel 247C, San Antonio, Texas. Presently KAJA operates on channel 247C licensed to San Antonio, Texas. The allotment of channel 247C1 at Lakeway creates a short spacing to KAJA of 149.43 kilometers. The Joint Parties propose to eliminate this short spacing by substituting channel 245C1 for channel 247C at San Antonio for use by KAJA. This substitution also requires a minor site modification.

1). KHFI – channel 244C1, Georgetown, Texas. Presently KHFI operates on channel 244C1. The substitution of channel 245C1 for channel 247C at San Antonio creates a short spacing to KHFI of 45.81 kilometers. In addition, the proposed allotment of channel 247C1 at Lakeway creates a short spacing to KHFI on channel 244C1 of 75.66 kilometers. Deleting channel 244C1 at Georgetown and substituting channel 243C2 at Lago Vista, Texas (as that community's first local service) can eliminate both of these short spacings. The substitution of channel 243C2 gives clearance to KAJA on channel 245C1 by 57.54 kilometers, while channel 243C2 is a fourth-adjacent to the

proposed allotment of KWTX on channel 247C1 at Lakeway, Texas. Therefore, it is of no concern.

a). KBAE – channel 242A, Llano, Texas. Presently KBAE operates on channel 242A licensed to Llano, Texas. The substitution of channel 243C2 for channel 244C1 (KHFI) creates a short spacing to Llano of 35.27 kilometers. This short spacing can be eliminated by the substitution of channel 297A for channel 242A at Llano. The substitution requires a minor site modification. This substitution requires some additional sub changes.

i). KLFX – channel 297A, Nolanville, Texas. Presently KLFX operates on channel 297A at Nolanville. It has an application on file for a 1.75 kilometers site change. If channel 297A is substituted for channel 242A at Llano, it creates a short spacing to Nolanville of 10.15 kilometers (8.40 kilometers if application site is used). This short spacing can be eliminated by substituting channel 249A for channel 297A at either the licensed site or the application site of KLFX. Channel 249A is available for substitution at Nolanville only after channel 248C is deleted at Waco and allocated to Lakeway on channel 247C1. However, there is one sub change required for this allotment.

\*). KNGT – channel 249C1, McQueeney, Texas. Previously channel 249C3 was deleted at Cuero, Texas and channel 249C1 was allotted to McQueeney, Texas. At this point, KNGT has not begun broadcast operations at McQueeney on channel 249C1. If channel

249A is substituted for channel 297A at Nolanville, there is a short spacing to McQueeney of 7.26 kilometers. This short spacing can be eliminated by deleting channel 249C1 at McQueeney and substituting channel 249C1 at Converse, Texas as that community's first local service. This community of license change will give clear spacing to Nolanville of 5.04 kilometers. Channel 249C1 at Converse can occur only after channel 247C is modified to channel 245C1 at San Antonio. The distance between channel 249C1 at McQueeney and channel 249C1 at Converse is 79.95 kilometers, thereby creating a short spacing of 165.05 kilometers. This is a mutually exclusive community of license change.

- b). RADD – channel 243A, Ingram, Texas. Currently channel 243A has been allocated to Ingram, Texas. The substitution of channel 243C2 at Lago Vista for channel 244C1 at Georgetown creates a short spacing to Ingram of 29.35 kilometers. Substituting channel 256A for channel 243A at the channel 243A allotment reference coordinates can eliminate this short spacing. Channel 256A is available for allotment at Ingram, since channel 256A was deleted at Camp Wood, Texas in MM Docket 99-214. However, the database shows a short space of 7.43 kilometers of the allotment of channel 256A at Ingram to the CP site of KLMO at Dilley, Texas. KLMO proposes using §73.215 spacing to the allotment of channel 256A at Ingram. The legal justification for using channel 256 as a

substitute channel at Ingram is discussed in the legal section of the instant PRM.

### **EXHIBITS EXPLAINED**

#### **KWTX**

Exhibit E, Figure 1 is an allocation study showing all the spacings for the substitution of channel 247C1 at Lakeway, Texas for channel 248C at Waco, Texas (KWTX). It demonstrates that only two spectrum changes are required for this substitution. However, it does not depict the sub changes required. The short space shown at Garwood is a PRM that should be executed inside the context of the instant PRM. The references to channel 248C2 at Marlin and Waco are related to proposals that were withdrawn and not on an appeal. Exhibit E, Figure 2 is a 70 dBu contour map, demonstrating that channel 247C1 at Lakeway complies with §73.315 of the Rules. Exhibit E, Figure 3 is gain/loss study map for the licensed class C facility's 60 dBu contour and the proposed hypothetical 60 dBu contour. Exhibit E, Figure 4 is a remaining services study for the loss area of KWTX. Exhibit E, Figure 5 is a list of the facilities used in the KWTX remaining services study.

#### **KAJA**

Exhibit E, Figure 6 is an allocation study showing all the spacings for the substitution of channel 245C1 for channel 247C at San Antonio, Texas (KAJA). It demonstrates that only one spectrum change is required for this substitution. However, it does not depict the subchanges required. The short spacings to Christine and Tilden, Texas are both a PRM that should be considered MX to the instant PRM and considered inside its context. Exhibit E, Figure 7 is a 70 dBu contour map, demonstrating that channel 247C1 at

Lakeway complies with §73.315 of the Rules. Exhibit E, Figure 8 is gain/loss study map for the licensed class C facility's 60 dBu contour and the proposed hypothetical 60 dBu contour. Since KAJA is a minimal class C (100 kW at 300 meters HAAT) and a maximum class C1 is being proposed, no gain/loss study is included. Exhibit E, Figure 9 is a maximum class C1 F(50,10) 54 dBu contour map, calculate via the means spelled out in the US/Mexican agreement governing FM service in the 88-108 MHz (1992). The azimuth from KAJA to the allotment at Piedras Negras is 243 degrees. The HAAT along that radial at 225 degrees is 325 meters and at 270 degrees is 303 meters. Therefore, the interpolated HAAT along the 243 degree radial is 319 meters.

The distance from the KAJA allocation site to the Piedras Negras site is 191 kilometers. With a back azimuth of 117 degrees, the interpolated HAAT is 607 meters. The distance to the protected 60 dBu contour becomes 92 kilometers. Therefore, the distance to the KAJA interfering contour cannot exceed  $191 - 92 = 99$  kilometers. An ERP of 56 kW for KAJA will prevent any overlap according to the provisions in the treaty. This is shown in Exhibit E, Figure 9.

#### KHFI

Exhibit E, Figure 10 is an allocation study showing all the spacings for the substitution of channel 243C2 at Lago Vista, Texas for channel 244C1 at Georgetown, Texas (KHFI). It demonstrates that only two spectrum changes are required for this substitution. However, it does not depict the sub changes required. The short spacing shown to channel 243C3 Kerrville and channel 243A at Goldthwaite are MX PRM's and should be considered inside the context of the instant PRM. Exhibit E, Figure 11 is a 70 dBu contour map, demonstrating that channel 243C2 at Lago Vista complies with §73.315 of the Rules.

Exhibit E, Figure 12 is gain/loss study map for the licensed class C1 facility's 60 dBu contour and the proposed hypothetical 60 dBu contour. Exhibit E, Figure 13 is a remaining services study for the loss area of KHFI. Exhibit E, Figure 14 is a list of the facilities used in the KHFI remaining services study.

#### KBAE

Exhibit E, Figure 15 is an allocation study showing all the spacings for the substitution of channel 297A at Llano, Texas for channel 242A at Llano, Texas (KBAE). It demonstrates that only one spectrum change is required for this substitution. However, it does not depict the sub change required. The short space shown to channel 297A at Goldthwaite is a MX PRM and should be compared inside the context of the instant PRM. An application on the part of KHLB, Burnet, Texas was filed that short spaces the substitution of channel 297A at Llano. This application does not propose protection to channel 297 at Llano. Therefore, it should be considered as MX to the instant PRM and appraised accordingly. Exhibit E, Figure 16 is a 70 dBu contour map, demonstrating that channel 297A at Llano complies with §73.315 of the Rules. Exhibit E, Figure 17 is gain/loss study map for the CP class A facility's 60 dBu contour and the proposed hypothetical 60 dBu contour.

#### KLFX

Exhibit E, Figure 18 is an allocation study showing all the spacings for the substitution of channel 249A for channel 297A at Nolanville, Texas (KLFX). It demonstrates that only one spectrum change is required for this substitution.

#### KNGT



Exhibit E, Figure 19 is an allocation study showing all the spacings for the substitution of channel 249C1 at Converse, Texas for channel 249C1 at McQueeney, Texas (KNGT). It demonstrates that the spectrum changes required for this substitution have been effectuated by the previous changes of KAJA. The short spaces shown to channel 249C3 at Mason, channel 250A at Tilden and channel 250A at Batesville, all Texas, are MX with the instant PRM and should be considered inside the context of the Joint Parties proposal. Exhibit E, Figure 20 is a 70 dBu contour map, demonstrating that channel 249C1 at Converse complies with §73.315 of the Rules. Exhibit E, Figure 21 is gain/loss study map for the licensed class C facility's 60 dBu contour and the proposed hypothetical 60 dBu contour. Exhibit E, Figure 22 is a remaining services study for the loss area of KNGT. Exhibit E, Figure 23 is a list of the facilities used in the KNGT remaining services study.

The Joint Parties realize that precedent establishes the fact that a service removed from a community, and that service has never begun operations, it is not considered a loss of service to the community. This is the case with KNGT at McQueeney. Channel 249C1 was placed at McQueeney in MM Docket 99-357, after it was deleted at Cuero. A construction permit for KNGT compliant with the Report and Order in MM Docket 99-357 has been issued. However, it will be several months before broadcast operations can began at McQueeney.

#### AD243

Exhibit E, Figure 24 is an allocation study showing all the spacings for the substitution of channel 256A for channel 243A at Ingram, Texas (AD243A). It demonstrates that no spectrum changes are required for this substitution. However, KLMO has a CP for a

channel that is short to the allotment of channel 256A at Ingram. It should be noted that the short spacing was created by the KLMO licensee, and not by the substitution of channel 256A at Ingram.

#### **The Joint Parties Petition for Rule Making Gain-Loss Area**

Exhibit E, Figure 25 is a tabulation of the gain/loss areas for each facility that requires an antenna location or class change. Stations that are proposed to have only their present channel substituted at their licensed site and require no class changes are omitted in this study. It is assumed that the service they would provide with a channel change would not deviate from their current coverage. In addition, the gain/loss totals are included according to the two divisions of the instant Petition for Rule Making discussed earlier.

The study includes ten facilities that have a deviation in their coverage area proposed by the instant Petition for Rule Making. Listed in the study is each station's loss and gain area in square kilometers and the population gains and losses in number of persons according to the U.S. Census Bureau's estimated 2000 population figures. It depicts a cumulative total loss area of 19,851 square kilometers and a gain area of 12,348 square kilometers. The Joint Parties Petition for Rule Making has a net area loss of 7,503 square kilometers.

The population loss has a cumulative loss of 347,772 persons, while the population gain is 1,432,014 persons. Therefore, the net population gain of The Joint Parties Petition for Rule Making is 1,084,242 persons.

### **Proposed Elimination of Short-Space**

The Joint Parties Petition for Rule Making, if adopted, will eliminate the following existing short-spaces between various stations:

- |                                    |          |
|------------------------------------|----------|
| 1) KBAE.C to KXXM, San Antonio, TX | 16.10 km |
| 2) KLFX.L to KWBU, Waco, TX        | 7.25 km  |

### **Conclusion**

The Joint Parties' Petition for Rule Making has demonstrated that it is in technical compliance with the present Commission Rules concerning such actions. The Petition for Rule Making produces three new first local services: Lakeway, Texas, a community of 8,002 persons; Lago Vista, Texas, a community of 4,507 persons; and Converse, Texas, a community of 11,508 persons, (all according to the 2000 US Census Bureau). The Petition for Rule Making also creates new service to a net of 1,084,242 persons while eliminating two existing short spacings.